

We claim:

1. An absorber pipe, especially for a parabolic collector in a solar heat collecting apparatus, said absorber pipe comprising a central metal pipe (3), a glass sleeve tube (2) surrounding said central metal pipe (3) so that an annular space (4) is formed between the central metal pipe and the glass tubular sleeve, a glass-metal transitional element (5) arranged on a free end of the glass tubular sleeve and at least one expansion compensating device (10) connecting the central metal pipe (3) and the glass-metal transitional element (5) with each other so as to be slidable relative to each other in a longitudinal direction;

wherein said at least one expansion compensating device (10) is arranged at least partially in said annular space (4) between said central metal pipe (3) and said glass-metal transitional element (5).

2. The absorber pipe as defined in claim 1, wherein said at least one expansion compensating device (10) comprises a folding bellows (11).

3. The absorber pipe as defined in claim 2, wherein an interior end (12) of the folding bellows (11) is connected with the metal pipe (3) with a connecting element (15) and an outer end (13) of the folding bellows (11) is connected with the glass sleeve tube (2) by the glass-metal transitional element (5).

4. The absorber pipe as defined in claim 3, wherein the connecting element (15) extends from said interior end (12) of the folding bellows (11) through a first circular space (5) formed between the folding bellows (11) and the metal pipe (3).
5. The absorber pipe as defined in claim 3, wherein the connecting element (15) extends into the vicinity of the outer end (13) of the folding bellow (11).
6. The absorber pipe as defined in claim 4, wherein the connecting element (15) has a circular disk (16) attached to the folding bellows (11) and said circular disk (16) goes or changes over into a conical or cylindrical pipe-shaped section (17,18') extending through the first circular space (5).
7. The absorber pipe as defined in claim 3, wherein the connecting element (15) is provided at least partially with a mirrored surface on a side facing said central metal pipe (3).
8. The absorber pipe as defined in claim 2, wherein an interior end (12) of the folding bellows (11) is connected with the sleeve tube (2) by a connecting element (15') and by a glass-metal transitional element (5) and an outer end (13) of the folding bellows (11) is connected with the metal pipe (3).
9. The absorber pipe as defined in claim 8, wherein the connecting element (15') extends from said interior end (12) of the folding bellows (11) through a second

circular space (9) formed between the folding bellows (11) and the sleeve tube (2).

10. The absorber pipe as defined in claim 9, wherein said connecting element (15') extends beyond said outer end (13) of the folding bellows (11).

11. The absorber pipe as defined in claim 9, wherein said connecting element (15') has a circular disk (16) attached to said folding bellows (11) and said circular disk (16) goes over into a pipe-shaped cylindrical section (18) extending through said second circular space (9).

12. The absorber pipe as defined in claim 8, wherein said glass-metal transitional element (5) is attached to an outer collar (19) formed on said connecting element (15').

13. The absorber pipe as defined in claim 8, wherein the folding bellows (11) is provided with a mirror surface at least partially covering a side facing said metal pipe (3).

14. The absorber pipe as defined in claim 1, having two ends and said at least one expansion compensating device (10) is arranged at each of said two ends.

15. The absorber pipe as defined in claim 1, wherein said annular space (4) is evacuated.

16. The absorber pipe as defined in claim 1, wherein said annular space (4) is filled with a noble gas.

17. A parabolic collector for a solar heat collecting apparatus, said parabolic collector comprising a longitudinally extending linear parabolic reflector having a focal line and at least one absorber pipe arranged along said focal line;

wherein said at least one absorber pipe comprises a central metal pipe (3), a glass sleeve tube(2) surrounding said central metal pipe (3) so that an annular space (4) is formed between the central metal pipe and the glass tubular sleeve, a glass-metal transitional element (5) arranged on a free end of the glass tubular sleeve and at least one expansion compensating device (10) connecting the central metal pipe (3) and the glass-metal transitional element (5) with each other so as to be slidable relative to each other in a longitudinal direction;

wherein said at least one expansion compensating device (10) is arranged at least partially in the annular space (4) between said central metal pipe (3) and said glass-metal transitional element (5).

18. The parabolic collector as defined in claim 17, wherein said at least one expansion compensating device (10) comprises a folding bellows (11).

19. The parabolic collector as defined in claim 18, wherein an interior end (12) of the folding bellows (11) is connected with the metal pipe (3) with a connecting element (15) and an outer end (13) of the folding bellows (11) is connected with the glass sleeve tube (2) by the glass-metal transitional element (5).

20. The parabolic collector as defined in claim 19, wherein the connecting element (15) extends from said interior end (12) of the folding bellows (11) through a first circular space (5) between the folding bellows (11) and the metal pipe (3).

21. The parabolic collector as defined in claim 19, wherein the connecting element (15) extends into the vicinity of the outer end (13) of the folding bellows (11).

22. The parabolic collector as defined in claim 20, wherein the connecting element (15) has a circular disk (16) attached to the folding bellows (11), which goes over into a conical or cylindrical pipe-shaped section (17, 18') extending through the first circular space (5).

23. The parabolic collector as defined in claim 19, wherein the connecting element (15) is provided at least partially with a mirror surface on a side facing said central metal pipe (3).

24. The parabolic collector as defined in claim 18, wherein an interior end (12) of the folding bellows (11) is connected with the sleeve tube (2) by a connecting element (15') and a glass-metal transitional element (5) and an outer end (13) of the folding bellows (11) is connected with the metal pipe (3).

25. The parabolic collector as defined in claim 24, wherein the connecting element (15') extends from said interior end (12) of the folding bellows (11) through a second circular space (9) formed between the folding bellows (11) and the glass sleeve tube (2).

26. The parabolic collector as defined in claim 25, wherein said connecting element (15') extends beyond said outer end (13) of the folding bellows (11).

27. The parabolic collector as defined in claim 25, wherein said connecting element (15') has a circular disk (16) attached to said folding bellows (11) and said circular disk (16) goes over into a pipe-shaped cylindrical section (18) extending through said second circular space (9).